

US DEPARTMENT OF COMMERCE - NOAA
 NOS - NATIONAL GEODETIC SURVEY
 SILVER SPRING MD 20910 - January 16, 2003

CALIBRATION BASE LINE DATA
 BASE LINE DESIGNATION: PIONEER PARK CBL
 PROJECT ACCESSION NUMBER: 15458
 NEAREST TOWN: COVINGTON

QUAD: N390843
 KENTUCKY
 KENTON COUNTY

LIST OF ADJUSTED DISTANCES (January 13, 2003)

FROM STATION	ELEV. (M)	TO STATION	ELEV. (M)	ADJ. DIST. (M) HORIZONTAL	ADJ. DIST. (M) MARK - MARK	STD. ERROR (MM)
0	152.824	486	151.547	485.9139	485.9155	.2
0	152.824	986	151.318	985.6048	985.6059	.2
0	152.824	1364	157.186	1364.4197	1364.4266	.4
486	151.547	986	151.318	499.7148	499.7149	.2
486	151.547	1364	157.186	878.5179	878.5360	.2
986	151.318	1364	157.186	378.8176	378.8631	.2

 * THE PIONEER BASE LINE IS A BROKEN BASE LINE WITH THE 486 METER POINT OFF LINE TO THE NORTH OF THE 0 TO 1364 METER LINE, AND *
 * WITH THE 986 METER POINT OFF LINE TO THE SOUTH OF THE 0 TO 1364 METER LINE. ALL THE ADJUSTED DISTANCES LISTED ARE FROM *
 * MONUMENT TO MONUMENT AND NOT PROJECTED ON TO A STRAIGHT LINE. THE FOLLOWING ANGLES WERE OBSERVED FROM THE *
 * END-POINTS AND THE 486 METER POINT: *
 * 486 - 0 - 1364 000 DEG 19 MIN 45.5 SEC *
 * 1364 - 0 - 986 000 DEG 04 MIN 35.4 SEC *
 * 1364 - 486 - 986 000 DEG 17 MIN 21.1 SEC *
 * 0 - 1364 - 486 000 DEG 11 MIN 0.9 SEC *
 * 986 - 1364 - 0 000 DEG 12 MIN 4.0 SEC *
 *
 * APPLY THE FOLLOWING CORRECTIONS TO THE ADJUSTED DISTANCES TO PROJECT TO THE STRAIGHT LINE BETWEEN THE 0 AND 1364 METER *
 * POINTS: *
 * DECREASE 0 TO 486 LENGTH BY 8.0 MM *
 * DECREASE 0 TO 986 LENGTH BY 0.9 MM *
 * DECREASE 486 TO 986 LENGTH BY 16.9 MM *
 * DECREASE 486 TO 1364 LENGTH BY 4.4 MM *
 * DECREASE 986 TO 1364 LENGTH BY 2.3 MM *

DESCRIPTION OF PIONEER PARK BASE LINE

YEAR MEASURED: 2001
LATITUDE: 39 00 14.1
LONGITUDE: 084 32 13.7
AZIMUTH: 030
CHIEF OF PARTY: JRM

THE BASE LINE IS LOCATED IN THE CITY OF COVINGTON, KENTUCKY NEXT TO KENTUCKY ROUTE #17, ABOUT 2.9 KM (1.8 MI) SOUTH OF ITS INTERSECTION WITH I-275, ON THE LAND OF THE KENTON COUNTY FISCAL COURT KNOWN AS PIONEER PARK.

THE BASE LINE IS A NORTHEAST-SOUTHWEST BASE LINE WITH THE 0 METER POINT ON THE SOUTHWEST END. IT CONSISTS OF THE 0, 486, 986, AND 1364 METER POINTS.

TO REACH THE 0-METER POINT FROM THE INTERSECTION OF INTERSTATE 275 AND KENTUCKY STATE ROUTE #17, GO SOUTH ON KENTUCKY STATE ROUTE #17 FOR 2.94 KM (1.83 MI) TO THE ENTRANCE TO PIONEER PARK. TURN RIGHT INTO THE ENTRANCE AND GO TO THE END OF A SHORT DRIVEWAY AND TURN LEFT (SOUTH) INTO THE PARKING LOT AND GO 94.0 M (310 FT) TO THE EDGE OF THE PARKING LOT AT THE ENTRANCE GATE TO THE TENNIS COURT. PARK VEHICLE AND PROCEED ON FOOT FOR 8 M (26 FT) BEYOND THE SOUTHEASTERLY CORNER OF THE LOT TO THE 0-METER POINT.

THE 0-METER POINT IS A SMALL CENTER-PUNCHED DOT IN THE TOP OF A NATIONAL GEODETIC SURVEY STAINLESS STEEL ROD DRIVEN INTO THE GROUND TO REFUSAL AND HOUSED BELOW GRADE IN AN ALUMINUM ENCLOSURE SURROUNDED WITH CONCRETE BOTH INSIDE AND OUTSIDE. THE TOP OF THE ENCLOSURE IS A HINGED ALUMINUM LID WITH INTEGRAL MAGNET AND BEARING THE KAPS DESIGNATION AND STAMPED "STATION 1". IT IS: 8.0 M (26.4 FT) SOUTH OF THE SOUTH EDGE OF THE BITUMINOUS PARKING LOT, 3.7 M (12.1 FT) EAST OF THE EASTERLY EDGE OF A BITUMINOUS SIDEWALK, AND 3.7 M (12.0 FT) EAST OF A 3 INCH DIAMETER PURPLE DISK, LABELED "SURVEY MARK" AND A LARGE ARROW, BONDED TO THE BITUMINOUS WALKWAY.

THE 486-METER POINT IS A SMALL CENTER-PUNCHED DOT IN THE TOP OF A NATIONAL GEODETIC SURVEY STAINLESS STEEL ROD DRIVEN INTO THE GROUND TO REFUSAL AND HOUSED BELOW GRADE IN AN ALUMINUM ENCLOSURE SURROUNDED WITH CONCRETE BOTH INSIDE AND OUTSIDE. THE TOP OF THE ENCLOSURE IS A HINGED ALUMINUM LID WITH INTEGRAL MAGNET AND BEARING THE KAPS DESIGNATION AND STAMPED "STATION 2". IT IS: 17.1 M (56.2 FT) EAST OF THE CENTER OF THE SERVICE DOOR TO THE SHELTER BUILDING AND SET IN THE CENTER OF A 4 FT X 4 FT CONCRETE PAD AT THE NORTHEAST CORNER OF THE NORTH HANDICAPPED PARKING SPACE IN THE SOUTHBOUND TRAFFIC LANE AND 10.5 M (34.4 FT) WEST OF AN ORANGE FIBERGLASS SURVEY MARK WITNESS POST.

THE 986-METER POINT IS A SMALL CENTER-PUNCHED DOT IN THE TOP OF A NATIONAL GEODETIC SURVEY STAINLESS STEEL ROD DRIVEN INTO THE GROUND TO REFUSAL AND HOUSED BELOW GRADE IN AN ALUMINUM ENCLOSURE SURROUNDED WITH CONCRETE BOTH INSIDE AND OUTSIDE. THE TOP OF THE ENCLOSURE IS A HINGED ALUMINUM LID WITH INTEGRAL MAGNET AND BEARING THE KAPS DESIGNATION AND STAMPED "STATION 3". IT IS: 25.6 M (84.0 FT) EAST OF THE EAST BANK OF BANKLICK CR., 3.5 M (11.4 FT) SOUTHWEST OF THE SOUTHWEST CORNER OF AN ALUMINUM PEDESTRIAN BRIDGE, 2.4 M (7.8 FT) SOUTH OF AN ORANGE FIBERGLASS SURVEY MARK WITNESS POST, 1.3 M (4.4 FT) WEST OF THE WEST EDGE OF A BITUMINOUS WALKWAY, AND (9.6 FT) NORTHEAST OF A SANITARY MANHOLE.

THE 1364-METER POINT IS A SMALL CENTER-PUNCHED DOT IN THE TOP OF A NATIONAL GEODETIC SURVEY STAINLESS STEEL ROD DRIVEN INTO THE GROUND TO REFUSAL AND HOUSED BELOW GRADE IN AN ALUMINUM ENCLOSURE SURROUNDED WITH CONCRETE BOTH INSIDE AND OUTSIDE. THE TOP OF THE ENCLOSURE IS A HINGED ALUMINUM LID WITH INTEGRAL MAGNET AND BEARING THE KAPS DESIGNATION AND STAMPED "STATION 4". IT IS SET IN CENTER OF A 4 FT X 6 FT CONCRETE PAD ON THE SOUTH SIDE OF THE NORTH ENTRANCE TO PIONEER PARK AND IS 5.2 M (16.9 FT) FROM THE WEST EDGE OF KENTUCKY STATE ROUTE #17 AND 3.8 M (12.5 FT) NORTHEAST OF AN ORANGE FIBERGLASS SURVEY MARK WITNESS POST.

USER NOTES - CBL USERS SHOULD TAKE CARE IN PLUMBING OVER ALL POINTS. ELEVATION FOR BASE LINE WAS OBTAINED FROM KDOT BENCH MARK "MADISON-1", 3RD ORDER GPS, ELEV 165.290 METERS. ELEVATION WAS TRANSFERRED TO BASE LINE STATION #1 TRIGONOMETRICALLY. ON SITE ELEVATIONS WERE ESTABLISHED FROM STATION #1 USING CONVENTIONAL DOUBLE-RUN DIFFERENTIAL LEVELS WITH A CLOSING ERROR OF 3 MM (0.01 FT).

ALL MARKS ARE NATIONAL GEODETIC SURVEY STAINLESS STEEL ROD DRIVEN INTO THE GROUND TO REFUSAL AND HOUSED BELOW GRADE IN AN ALUMINUM ENCLOSURE SURROUNDED WITH CONCRETE BOTH INSIDE AND OUT. THE TOP OF THE ENCLOSURE IS A HINGED ALUMINUM LID WITH INTEGRAL MAGNET AND BEARING THE KAPS DESIGNATION AND STAMPED WITH THE RESPECTIVE STATION NUMBER. NOTE: THE LID IS SECURED WITH A 1/4"x3/4" LONG FLATHEAD STAINLESS STEEL BOLT REQUIRING A MEDIUM SIZE PHILLIPS SCREWDRIVER TO OPEN.

THIS BASE LINE WAS ESTABLISHED IN CONJUNCTION WITH THE KENTUCKY ASSOCIATION OF PROFESSIONAL SURVEYORS (KAPS) AND THE NATIONAL GEODETIC SURVEY. FOR TECHNICAL INFORMATION, KEYS TO ACCESS THE MONUMENTS, QUESTIONS, OR REPORT DAMAGE, PLEASE CONTACT JOHN ROSS, 379 SMITH MARTIN LANE, CYNTHIANA, KY 41031 OR E-MAIL JWROSSJR@INTHEHILLS.COM OR CONTACT ANY OTHER KAPS NORTHERN KY CHAPTER MEMBER OR KAPS AT 1-800-866-3029 OR 1-502-695-2349.